

Amendment and Response

Applicant: Douglas W. Johnson

Serial No.: 10/802,437

Filed: March 17, 2004

Docket No.: 10378US01

Title: TAPE GUIDE DECREASING TRANSVERSE MOVEMENT OF DATA STORAGE TAPE AT HIGH FREQUENCIES

REMARKS

This is responsive to the Non-Final Office Action mailed September 12, 2007. In that Office Action, claims 13-15 were rejected under 35 U.S.C. §112, second paragraph, as the limitation "the length of tape" as having insufficient antecedent basis; claim 18 was rejected under 35 U.S.C. §112, second paragraph, as the limitation "the longitudinal stress waves" also as having insufficient antecedent basis. Claims 1-19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lelandais, U.S. Patent No. 4,310,863 ("Lelandais").

With this Response, claims 8, 12-15, and 18 have been amended; claim 20 has been canceled; and claim 21 added. Claims 1-19 and 21 are currently pending in the application and are presented for reconsideration and allowance.

35 U.S.C. §112, Second Paragraph, Rejections

Claims 13-15 and 18 have been amended to correct the unintentional typographical errors identified by the Examiner. In light of these corrections, withdrawal of the rejections under Section 112, second paragraph, is respectfully requested.

35 U.S.C. §103 Rejections

In rejecting claim 1 as being obvious over Lelandais, the Office Action concedes that the parameters of claim 1 (e.g., the claimed tape guide limits a spectral content of data storage tape lateral movement measured at the read/write head to less than 0.1 μm at lateral movement frequencies between 50 and 500 cycles/meter) are not taught. Instead, the Office Action contends that it would have been obvious to one of skill to modify Lelandais to meet the features of claim 1. Applicant respectfully disagrees. In particular, the Office Action identifies the tension rollers 16, 32, including the sheath 62 provided therewith, as being the "tape guide" of claim 1. As shown in FIG. 1, the tension rollers 16, 32 control tape tension relative to (and from) the take-up spool 10. Other rollers (i.e., guide rollers 18, 30 and lift-off rollers 26, 28) that do not include the sheath 62 are provided for maintaining contact with the tape heads 22, 24. That is to say, the tension rollers 16, 32 identified in the Office Action as being the tape guide of

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claim 1 do not effectuate precise lateral movement control at the heads 22, 24. As such, it is respectfully submitted that one of skill would not be motivated to experiment with varying configurations of the sheath 62 of the tension rollers 16, 32 to achieve the parameters of claim 1 due to the presence of the intervening rollers 18, 26, 28 and 30; any lateral movement "effects" resulting from alterations to the sheath 62 of the tension rollers 16, 32 would essentially be obliterated by interface of the tape with the rollers 18, 26, 28, and 30. Also, the parameters of claim 1 have been shown to be critical, for example at page 14, line 30 – page 15, line 7, further dictating that one of skill could not have modified Lelandais in accordance with claim 1 though routine skill.

Finally, the sheath 62 of Lelandais is formed of rubber or similar resilient, elastomeric material to absorb longitudinal pressure waves (i.e., into a plane of the sheath's face). *Lelandais*, col. 3, ll. 14-57. The grooves 64 are employed with certain materials to control the effective resiliency. Lelandais does not disclose that the grooves 64 have any effect on lateral tape movement, and thus one of skill would not consider modifying the rubber sheath 62 in a manner resulting in the lateral tape movement parameters of claim 1.

For at least the above reasons, it is respectfully submitted that claim 1, as well as claims 2-7 depending therefrom, are allowable over the cited art.

Claim 8 has been amended to recite that the first and second tape guides are positioned immediately adjacent the read/write head (relative to the tape path) at opposite sides thereof, and that at least one of the tape guides forms a plurality of concentric grooves. In rejecting claim 8, the Office Action identifies the tension rollers 16, 32 of Lelandais as being the "tape guides" of claim 8. As described above, the tension rollers 16, 32 are displaced a relatively large distance from the tape heads 22, 24, and a series of intervening, additional rollers 18, 26, 28, and 30 are located between the heads 22, 24 and the tension rollers 16, 32. Thus, the tension rollers/tape guides 16, 32 are not immediately adjacent the tape heads 22, 24, in direct opposition to the features of amended claim 8. Instead, it is the rollers 18, 26, 28, and 30 that are immediately adjacent one or more of the heads 22, 24. Lelandais specifically does not include the grooved sheath 62 with any of these immediately adjacent rollers 18, 26, 28, and 30, such that it would

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not be reasonably obvious for one of skill to modify Lelandais in accordance with amended claim 8. For at least these reasons, then, it is respectfully submitted that claim 8, as well as claims 9-19 depending therefrom, are allowable over the cited art.

Newly presented claim 21 depends from claim 8 and thus is allowable. In addition, claim 21 recites that no other guide(s) are positioned between the first tape guide and the read/write head or between the second tape guide and the read write head (relative to the tape path). Support for this language is found, for example, in FIG. 10. In contrast, and as described above, Lelandais requires one or more additional rollers between the grooved tension rollers 16, 32 and the tape heads 22, 24. Thus, claim 21 recites additionally allowable subject matter.

CONCLUSION


In view of the above, Applicant respectfully submits that pending claims 1-19 and 21 are in form for allowance and are not taught or made obvious by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of the pending claims are respectfully requested.

No fees are required under 37 C.F.R. 1.16(b)(c). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 09-0069.

The Examiner is invited to contact the Applicant's representative at the below-listed telephone number to facilitate prosecution of this application.

Date: 12/12/07
EDL:TAC:jms

Respectfully submitted,


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